

Claims

1. A method of compensating for non-constant delay times of a network transmitting MPEG-2 and MPEG-4 data packets, comprising the steps of:
- estimating a network system jitter associated with reference data packets carrying clock-stamped reference values; and
- 5 adjusting said clock-stamped reference values based on said estimated network system jitter.
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2. The method of claim 1, wherein said step of estimating a network system jitter comprises calculating a mean jitter value associated with a sample of data packets.
3. The method of claim 2, wherein said adjusting step comprises the substeps of calculating an estimated jitter value associated with a subsequent reference data packet based on said mean jitter value; and adjusting said clock-stamped reference value of said subsequent reference data packet based on said estimated jitter value associated with said
- 5 subsequent reference data packet.
4. The method of claim 3, wherein said step of calculating an estimated jitter value associated with a subsequent reference data packet comprises the substep of calculating a corrected theoretical arrival time of a subsequent reference data packet based upon said calculated mean jitter value.

5. The method of claim 4, wherein said calculation of a jitter value associated with a subsequent reference data packet is based upon said corrected theoretical arrival time and an actual arrival time of said subsequent reference data packet.

6. The method of claim 5, wherein said adjusting step further comprises the substep of translating said jitter value associated with said subsequent reference data packet to a corresponding number of clock ticks.

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7. The method of claim 1, wherein said adjusting step comprises the substeps of calculating an estimated jitter value associated with a subsequent reference data packet; and

adjusting said clock-stamped reference value of said subsequent reference data packet based on said estimated jitter value associated with said subsequent reference data packet.

8. The method of claim 7, wherein said step of calculating an estimated jitter value associated with a subsequent reference data packet comprises the substep of calculating a corrected theoretical arrival time of a subsequent reference data packet.

9. The method of claim 8, wherein said calculation of a jitter value associated with a subsequent reference data packet is based upon said corrected

theoretical arrival time and an actual arrival time of said subsequent reference data packet.

10. The method of claim 9, wherein said adjusting step further comprises the substep of translating said jitter value associated with said subsequent reference data packet to a corresponding number of clock ticks.

11. A method of compensating for non-constant delay times of a network transmitting MPEG-2 and MPEG-4 data packets, comprising the steps of:

periodically receiving data packets with a nominal period;

detecting a clock-stamp reference value in a first reference data packet;

5 calculating a jitter value of each data packet received subsequent to said first reference data packet until a second reference data packet having a clock-stamp reference value is detected;

determining a sample mean jitter from said jitter values;

establishing a corrected theoretical arrival time for said second reference data

10 packet;

estimating the jitter of said second reference data packet; and

adjusting said clock-stamp reference value of said second reference data packet.

12. An MPEG-2 and MPEG-4 transmission network, comprising:

a source device that transmits MPEG-2 or MPEG-4 data packets with a nominal period;

a destination device that receives said data packets;

5 an electronic communication channel having a non-constant delay period that is coupled between said source device and said destination device to receive said data packets from said source device and provide said data packets to said destination device;

said destination device comprising an electronic controller that calculates a mean jitter value for a sample of said data packets, estimates a jitter value for a subsequent

10 reference data packet outside of said sample, and adjusts a clock-stamp reference value of said subsequent reference data packet based on said estimated jitter value.

09/07/12 05:00

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